

## Patent Abstracts of Japan

PUBLICATION NUMBER : 2002168825  
PUBLICATION DATE : 14-06-02

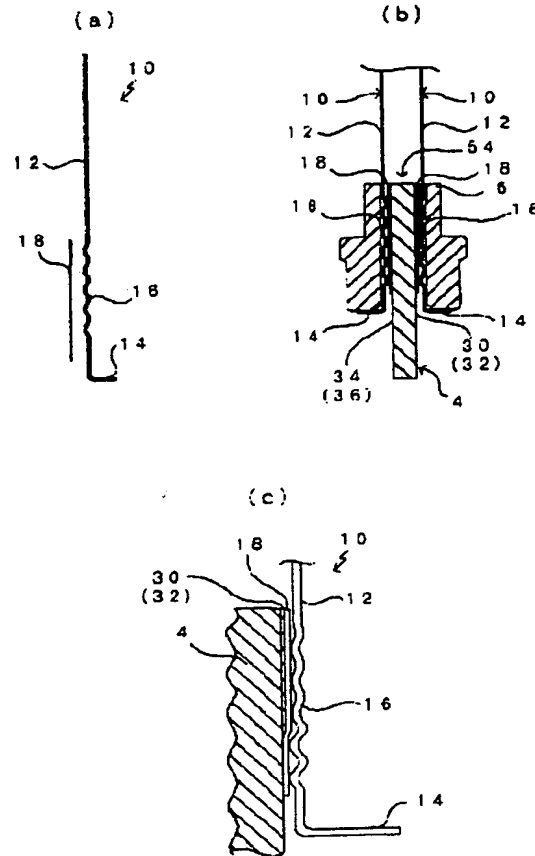
APPLICATION DATE : 30-11-00  
APPLICATION NUMBER : 2000365390

APPLICANT : NGK SPARK PLUG CO LTD;

INVENTOR : ISHIKAWA SATOSHI;

INT.CL. : G01N 27/409

TITLE : TERMINAL CONNECTION  
STRUCTURE FOR SENSOR



**ABSTRACT :** PROBLEM TO BE SOLVED: To provide a terminal connection structure for a sensor in which the defect of the electrical connection of a lead frame to electrode terminal parts of a detecting element is hard to generate in the terminal connection structure for the sensor in a shape in which the lead frame is electrically connected to the electrode terminal parts of the detecting element.

**SOLUTION:** As shown in Fig. (a), the lead frame 10 which is provided at an oxygen sensor 2 is formed so as to be provided with frame bodies 12, bent parts 14 which are formed by bending ends on one side of the frame bodies 12, wavy parts 16 which are formed on the side of the bent parts 14 at the frame bodies 12 and flat plate members 18 which come into contact with the electrode terminal parts of the detecting element. Since the members 18 come into face contact with the electrode terminal parts 30, 32, 34, 36 of the detecting element 4, the contact area of the lead frame 10 with the electrode terminal parts is increased, their contact resistance can be suppressed to be low, and the electrode terminal parts are hard to shave off even when the lead frame 10 is repeatedly swollen and contracted due to a temperature change.

COPYRIGHT: (C)2002,JPO